

**STATEMENT OF BASIS (AI No. 32804)**

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0087777 to discharge to waters of the State of Louisiana.

**THE APPLICANT IS:** CII Carbon, LLC  
Gramercy Coke Plant  
P.O. Box 1521  
Gramercy, LA 70052

**ISSUING OFFICE:** Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313

**PREPARED BY:** Kelli Hamilton

**DATE PREPARED:** November 14, 2006

**1. PERMIT STATUS**

**A. Reason For Permit Action:**

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

**B.** LPDES permit - LPDES permit effective date: February 1, 2002  
LPDES permit expiration date: January 31, 2007  
EPA has not retained enforcement authority.

**C.** Date Application Received: August 3, 2006

**2. FACILITY INFORMATION**

**A. FACILITY TYPE/ACTIVITY - petroleum coke calcining facility**

CII Carbon, LLC, Gramercy Coke Plant is an existing facility that processes green petroleum coke to produce calcined coke. The green coke is received by barge or truck and stored on an open pad on the west side of the facility. Calcined coke is stored in enclosed domes at the facility. The coke calcining process generates discharges such as area washdown water, wet scrubber overflow, kiln cooling water, and boiler blowdown. These effluents are collected in the facility ditch system and routed through a series of five gravity fed settling lagoons prior to being discharged.

**B. FEE RATE**

1. Fee Rating Facility Type: minor
2. Complexity Type: V
3. Wastewater Type: III (previously Wastewater Type of I was used due to 64.8 MGD of once through non-contact cooling water for Outfall 003 - however, co-generation unit has not been installed. Wastewater Type may need to be changed once notification of installation of co-generation unit has been received by this Office.)
4. SIC code: 2999

**C. LOCATION** - 1140 Jefferson Highway in Gramercy, St. James Parish  
Latitude 30°03'15", Longitude 90°40'02"

**D.** CII Carbon, LLC, being at 145.6 M.A.H.P. is 0.3 miles upstream from the potable water intake for Kaiser Aluminum & Chemical Corporation, Gramercy; 1.3 miles upstream from the potable water intake for Colonial Sugars, Inc., Gramercy; and 6.3 miles upstream from the drinking water intake for St. John Waterworks-Lions Plant, Reserve.

**3. OUTFALL INFORMATION**

Outfall 001

Discharge Type: stormwater runoff, utility wastewaters (including but not limited to process area washdown water, process cooling water streams, wet scrubber overflow, boiler blowdown, periodic boiler flushing), and previously monitored sanitary wastewater

Treatment: series of gravity fed settling lagoons

Location: at the point of discharge north of settling lagoon #5, Latitude 30°03'13", Longitude 90°40'25"

Flow: 0.234 MGD

Discharge Route: Blind River Swamp via drainage ditches

Outfall 101

Discharge Type: sanitary wastewater

Treatment: aeration, filtration, and chlorination

Location: at the point of discharge from the package treatment plant, Latitude 30°03'13", Longitude 90°40'25"

Flow: 0.0016 MGD

Discharge Route: to the settling basin

Outfall 002

Discharge Type: coke barge rainwater  
Treatment: none  
Location: from the point of discharge from the barge prior to combining with any other waters  
Flow: variable  
Discharge Route: Mississippi River

Outfall 003

Discharge Type: once through non-contact cooling water  
Treatment: none  
Location: outfall does not exist at this time  
Flow: None (co-generation unit has not been installed)  
Discharge Route: Mississippi River

**4. RECEIVING WATERS**

STREAM - Blind River Swamp via drainage ditches (001) and the Mississippi River (002 & 003)

BASIN AND SEGMENT - Lake Pontchartrain (Segment 040403) and the Mississippi River Basin (Segment 070301)

DESIGNATED USES - Segment 040403  
a. primary contact recreation  
b. secondary contact recreation  
c. propagation of fish and wildlife  
d. outstanding natural resource waters (Blind River only)

DESIGNATED USES - Segment 070301  
a. primary contact recreation  
b. secondary contact recreation  
c. propagation of fish and wildlife  
d. drinking water supply

**5. PROPOSED EFFLUENT LIMITS**

BASIS - See Rationale below.

Summary of Proposed Changes From the Current LPDES Permit: None

**6. COMPLIANCE HISTORY/COMMENTS**

A. Compliance History

No records of compliance actions were found.

B. DMR Review/Excursions - DMRs were reviewed from July 2004 to September 2006. The excursions are as follows:

<u>Date</u>	<u>Parameter</u>	<u>Outfall</u>	<u>Reported Value</u>	<u>Permit Limits</u>
1/05-6/05	Fecal Coliform	101	4,080	400

#### 7. EXISTING EFFLUENT LIMITS

Outfall 001 -		Outfall 101 -	
TOC	--:75 mg/l	BOD	--:45 mg/l
TSS	--:70 mg/l	TSS	--:45 mg/l
Oil and Grease	10:15 mg/l	Fecal Coliform	--:400 colonies/100ml
pH	6-9		

Outfall 002 -		Outfall 003 -	
TOC	--:75 mg/l	Temperature	Report:Report
TSS	--:70 mg/l	Free Available Chlorine	0.2:0.5 mg/l
Oil and Grease	--:15 mg/l	pH	6-9
pH	6-9		

#### 8. ENDANGERED SPECIES

The receiving waterbody, Subsegment 070301 of the Mississippi River Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon, which is listed as an endangered species. The receiving waterbody, Subsegment 040403 of the Lake Pontchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the West Indian Manatee, which is listed as an endangered species. LDEQ has not submitted this draft permit to the FWS for review in accordance with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and based on information provided by the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Pallid Sturgeon or the West Indian Manatee. Effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. The more stringent of technology and water quality based limits (as applicable) have been applied to ensure maximum protection of the receiving water.

#### 9. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

**10. TENTATIVE DETERMINATION**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

**11. PUBLIC NOTICES**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

**12. STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT**

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water shall not be required to obtain and LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 2999 are considered to have storm water discharges associated with industrial activity.

The SWP3 shall be prepared, implemented, and maintained within (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in the storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).

**Rationale for CII Carbon, LLC**

1. **Outfall 001** stormwater runoff, utility wastewaters (including but not limited to process area washdown water, process cooling water streams, wet scrubber overflow, boiler blowdown, periodic boiler flushing), and previously monitored sanitary wastewater (estimated flow is 0.234 MGD)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (mg/l)	<u>Reference</u>
Flow (GPD)	Report:Report	LAC 33:IX.2707.I.1.b.
TOC	---:75	*
TSS	---:70	*
Oil & Grease	10:15	*
pH	6-9 (su)	*

**Treatment:** settling pond

**Monitoring Frequency:** 1/week

**Limits Justification:** The previous permit, and BPJ using the maximum TSS limits in the guidelines for Coal Preparation Plants (40 CFR 434.20).

2. **Outfall 101** treated sanitary wastewater (estimated flow is 0.0016 MGD)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Weekly Avg. (mg/l)	<u>Reference</u>
Flow (GPD)	Report:Report	LAC 33:IX.2707.I.1.b.
BOD <sub>5</sub>	---:45	*; Class I General Sanitary Permit
TSS	---:45	*; Class I General Sanitary Permit
Fecal Coliform colonies/100 ml	---:400	*; Class I General Sanitary Permit

**Treatment:** activated sludge and disinfection

**Monitoring Frequency:** All parameters shall be monitored once per six (6) months in accordance with the current permitting practices for similar outfalls.

**Limits Justification:** BPJ from the Class I Sanitary Discharge General Permit, and the previous permit.

3. **Outfall 002** coke barge rainwater(flow is variable)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (mg/l)	<u>Reference</u>
Flow (GPD)	Report:Report	LAC 33:IX.2707.I.1.b.
TOC	---:75	*
TSS	---:70	*
Oil & Grease	---:15	*
pH	6-9 (su)	*

**Treatment:** none

**Monitoring Frequency:** 1/month

**Limits Justification:** BPJ based on the previous permit, and permitted in accordance with the current permitting practices for similar outfalls.

4. **Outfall 003** once through non-contact cooling water(estimated average flow is None (co-generation unit has not been installed))

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (mg/l)	<u>Reference</u>
Flow (GPD)	Report:Report	LAC 33:IX.2707.I.1.b.
Free Available Chlorine (*1)	0.2:0.5	40 CFR 423
Temperature °F(*2)	---:Report (*3)	40 CFR 423
pH	6-9 (su) (*3)	40 CFR 423

**Treatment:** none

**Monitoring Frequency:** 1/week, same as numerous similar discharges.

**Limits Justification:** BPJ, Using 40 CFR 423 (Steam Electric Power Generating) due to the quantity of electricity estimated to be marketed (>50% total).

- (\*1) Sample shall be taken during usage of any biofouling agents or during periods of chlorination.
- (\*2) Future water quality studies may require temperature limitations for once through non-contact cooling water. If such a limitation were imposed, the permittee would be required to reduce the temperature of the effluent prior to discharge.
- (\*3) Instantaneous maximum.

\* Existing permits for similar outfalls  
BPJ Best Professional Judgement  
su Standard Units

NOTE

BMP in Part II addresses stormwater accumulated in open top barges and dock washdown water.

TMDL Waterbodies

Outfall 001 (includes Internal Outfall 101)

Subsegment 040403, Blind River-Source to confluence with Amite River Diversion Canal, is listed on LDEQ's Final 2004 303(d) List as impaired for nutrients, phosphorus, sedimentation/siltation, organic enrichment/low DO, mercury, and turbidity. To date no TMDL's have been completed for this subsegment. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDL's for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the petroleum coke calcining facility point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated. Therefore, for the purposes of this permit, organic enrichment/low DO will be addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards as follows:

Organic enrichment/low DO

To protect against the further impairment of the organic enrichment/low DO impairment cause, a TOC limit will be placed on Outfall 001 in the permit.

Outfall 002 and 003

Subsegment 070301, Mississippi River-From Monte Sano Bayou to Head of Passes, is not listed on LDEQ's Final 2004 303(d) List as impaired, and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.